APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,021	08/29/2003	Huitao Luo	200310865-1	2093

22879 7590 07/17/2007		EXAMINER
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INTELLECTUAL PROPERTY ADMINISTRATION	ART UNIT	PAPER NUMBER
FORT COLLINS, CO 80527-2400	2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
Office Action Summary		10/653,021	LUO ET AL.
		Examiner	**Art Unit**	
		Sheela C. Chawan	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>24 April 2007</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-68* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *9-10,18-22, 30-33,37- 42, 45, 61, 62, 63 and 68* is/are allowed.

6) ☒ Claim(s) *1 and 58* is/are rejected.

7) ☒ Claim(s) *2-17, 23- 29, 34 - 36, 46- 48, 59 –60, 64-67* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's amendment filed on 4/24/07 has been entered and made of record.

Claims 1-68 are pending in the application.

Response to Argument

2.   Applicant's arguments, see page 15 of the remarks, filed 4/24/07, with respect to

Claims 1-8, 14-17, 20-21,23-29, 31-36, 38, 42-44, 46-50, 52-55, 58-60, 64-68, have

been fully considered and are persuasive. The rejection of claims 1-8, 14-17, 20-21,23-

29, 31-36, 38, 42-44, 46-50, 52-55, 58-60, 64-68, has been withdrawn.

Applicant's arguments see page 16, lines 15-23 of the remarks, filed 4/24/07,

with respect to the rejection of claims 1-8, 14-17, 20-21,23-29, 31-36, 38, 42-44, 46-50,

52-55, 58-60, 64-68, under 102 (e) rejection have been fully considered and are

persuasive. Therefore, the rejection has been withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of Kurtenbach et al., (US.

20040196503 A1).

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by

another filed in the United States before the invention by the applicant for patent or (2) a patent granted

on an application for patent by another filed in the United States before the invention by the applicant for

patent, except that an international application filed under the treaty defined in section 351 (a) shall have

the effects for purposes of this subsection of an application filed in the United States only if the

international application designated the United States and was published under Article 21 (2) of such

treaty in the English language.

Claims 1 and 58, are rejected under 35 U.S.C. 102(e) as being anticipated by

Kurtenbach et al., (US. 20040196503 A1).

As to claim 1, Kurtenbach discloses a method of processing an input image,

comprising:

sub-sampling the input image to generate a thumbnail image <u>comprising a</u>

<u>reduced-size version of the input image in its entirety (page 1, paragraph 0010);</u>

<u>and</u>

detecting redeye pixel areas in the thumbnail image (page 3, paragraph 0034

and 0035, page 4, paragraph 0036).

Allowable Subject Matter

4.   Claims 2-17, 23- 29, 34 - 36, 46- 48, 59 –60, 64-67 are objected to as being

dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims.

Reason For Allowance

5.   The following is an examiner's statement of reasons for allowance:

Regarding claim 9, Applicant's arguments, see page 17, lines 26- 29 of the

remarks, filed 4/24/07. The prior art of record Schildkraut (US.6,292,574) discloses the

process of determining those skin sub-maps that have an acceptable degree of fit to an

ellipse with an acceptable aspect ratio and the process of computing a resize factor for

resizing the sub-color-regions. Nowhere in the disclosure of Schildkraut teach "sub-

sampling the input image to generate a thumbnail image; and detecting redeye pixel

areas in the thumbnail image, wherein detecting redeye pixel areas comprises

computing measures of pixel redness in the thumbnail image and identifying a

preliminary set of candidate redeye pixel areas based on the computed pixel redness

measures, wherein identifying the preliminary set of candidate redeye pixel areas

comprises enlarging a given candidate redeye pixel area having a dimension below a

threshold size to generate an enlarged pixel area", as recited in claim 9 . The prior art

of record fails to teach either singularly or in combination, fails to anticipate or render

the above limitations obvious. Claims 9 -10 has been withdrawn from the rejection and

is allowed.

Regarding claim 18, the prior art of record Schildkraut (US.6,292,574) discloses

a method for automatically detecting redeye defects. Schildkraut fails to teach "sub-

sampling the input image to generate a thumbnail image; detecting redeye pixel areas

in the thumbnail image, wherein detecting redeye pixel areas comprises computing

measures of pixel redness in the thumbnail image, and identifying a preliminary set of candidate redeye pixel areas based on the computed pixel redness measures; pairing candidate redeye pixel areas in the preliminary set, wherein pairing candidate redeye pixel areas comprises comparing a candidate texture pattern computed for a candidate pair of candidate redeye pixel areas in the preliminary set with a reference texture pattern, wherein comparing the candidate texture pattern with the reference texture pattern comprises generating a feature vector representative of the candidate texture pattern and comparing the generated feature vector with a statistical model of the reference texture pattern: and filtering unpaired candidate redeye pixels areas from the preliminary set ", as recited in claim 18. The prior art of record fails to teach either singularly or in combination, fails to anticipate or render the above limitations obvious. Claims 18-22 has been withdrawn from the rejection and is allowed.

Regarding claim 30, the prior art of record Schildkraut (US.6,292,574) discloses a method for automatically detecting redeye defects. Schildkraut fails to teach "sub-sampling the input image to generate a thumbnail image; detecting redeye pixel areas in the thumbnail image; and correcting redeye in the input image based on redeye pixel areas detected in.the thumbnail image-wherein correcting redeye comprises identifying discrete redeye pixel areas separated from eyelid regions ", as recited in claim 30. The prior art of record fails to teach either singularly or in combination, fails to anticipate or render the above limitations obvious. Claims 30- 33 has been withdrawn from the rejection and is allowed.

Regarding claim 37, the prior art of record Schildkraut (US.6,292,574) discloses a method for automatically detecting redeye defects. Schildkraut fails to teach " sub-sampling the input image to generate a thumbnail image; detecting redeye pixel areas in the thumbnail image; and correcting redeye in the input image based on redeye pixel areas detected in the thumbnail image, wherein correcting redeye comprises classifying pixels between concentric inner and outer bounding regions based on a grayscale threshold ", as recited in claim 37, The prior art of record fails to teach either singularly or in combination, fails to anticipate or render the above limitations obvious. Claims 37 – 42 and 45 has been withdrawn from the rejection and is allowed.

Regarding claims 49 and 68, the prior art of record Schildkraut (US.6,292,574) discloses a method for automatically detecting redeye defects. Schildkraut fails to teach "detecting one or more redeye pixel areas corresponding to respective areas in the input image; classifying each pixel in the input image corresponding to the detected redeye pixel areas as a redeye pixel or a non-redeye pixel on a line-by-line basis without reference to pixels in adjacent lines; and correcting the original color values of pixels in the input image classified as redeye pixels", as recited in claims 49 and 68, the prior art of record fails to teach either singularly or in combination, fails to anticipate or render the above limitations obvious. Claims 49- 57 has been withdrawn from the rejection and is allowed.

Claim 61 is representative of claim 9 above.

Regarding claim 62, the prior art of record Schildkraut (US.6,292,574) discloses a method for automatically detecting redeye defects. Schildkraut fails to teach "

sub-sample the input image to generate a thumbnail image; and detect redeye pixel areas in the thumbnail image wherein the redeye detection module computes measures of pixel redness in the thumbnail image, identifies a preliminary set of candidate redeye pixel areas based on the computed pixel redness measures and filters from the preliminary set each candidate redeye pixel area located in an area of the digital image having a computed grayscale contrast relative to at least one respective neighboring pixel area less than a prescribed grayscale contrast threshold", as recited in claim 61, the prior art of record fails to teach either singularly or in combination, fails to anticipate or render the above limitations obvious. Claim 62 has been withdrawn from the rejection and is allowed.

Regarding claim 63, the prior art of record Schildkraut (US.6,292,574) discloses a method for automatically detecting redeye defects. Schildkraut fails to teach "sub-sample the input image to generate a thumbnail image; detect redeye pixel areas in the thumbnail image; wherein the redeye detection module computes measures of pixel redness in the thumbnail image identifies a preliminary set of candidate redeye pixel areas based on the computed pixel redness measures, and the redeye detection module is further operable to: identify a pixel boundary of a pixel region surrounding a given candidate redeye pixel area; classify pixels within the pixel boundary as red pixels and non-red pixels by applying a threshold to the computed pixel redness measures; and filter the given candidate redeye pixel area from the preliminary set when a set of contiguous red pixels extends from the given candidate redeye pixel area to the pixel boundary", as recited in claim 63, the prior art of record fails to teach either singularly or

in combination, fails to anticipate or render the above limitations obvious. Claim 62 has

been withdrawn from the rejection and is allowed.

Contact Information

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheela Chawan
Patent Examiner
Group Art Unit 2624
July 2, 2007

SHEELA CHAWAN
PRIMARY EXAMINER